Sprint

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March 8, 2002

Via Electronic Mail Delivery

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
445 12th Street SW, Room TW-B204
Washington, D.C. 20554

Re: ***Written Ex Parte Communication***
Enhanced 911 Emergency Calling Systems – Non-Initialized Handsets/Call Back, CC Docket No. 94-102

Dear Mr. Caton:

Sprint Spectrum L.P., d/b/a Sprint PCS ("Sprint PCS"), submits this ex parte to address the subject of a call back capability for non-service-initialized mobile handsets ("non-initialized handsets").[1] The record evidence does not demonstrate that there is a problem warranting regulatory intervention and the imposition of new government mandates. In addition, the record evidence establishes that a call back capability from non-initialized handsets is not technically feasible for existing wireless networks. The Commission should not mandate further requirements in this area. Moreover, industry and public safety agencies are currently focused on implementing operational Phase I and Phase II systems, and now is not the time to divert resources from this important effort, especially to a problem that remains undemonstrated.

It should be recalled that the so-called "call back problem" arose because the Commission rejected the consensus recommendation of industry and the public safety community to limit 911 calls to initialized handsets.[2] Sprint PCS respectfully submits that if the Commission now believes that the absence of a call back capability is a problem, the solution is for the Commission to revisit its earlier decision to permit 911 calling from non-initialized handsets.

THERE IS NO FACTUAL EVIDENCE SUPPORTING THE NEED FOR A CALL BACK CAPABILITY FROM NON-INITIALIZED HANDSETS

The Commission commenced this proceeding because of a concern that handsets used in various donor programs were not initialized and that, as a result, call back capabilities were not

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[1] *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems,* CC Docket No. 94-102, *Further Notice of Proposed Rulemaking,* FCC 01-175, 16 FCC Rcd 11491 (2001)("*Call Back NPRM*").

[2] The Commission, in requiring carriers to deliver 911 calls from non-initialized handsets, recognized that a call back capability would not be available. *See E911 Reconsideration Order,* 12 FCC Rcd 22665, 22681-82, ¶ 31 (1997).

available.[3] However, it is important to emphasize that the record evidence developed in response to the NPRM has demonstrated that this concern was unfounded. Specifically, CTIA reported that its Call to Protect program only uses activated handsets.[4] Additionally, Sprint PCS and other carriers also use activated handsets in their donation programs.[5] Thus, the original concern -- and basis for seeking comment on a call back capability for non-initialized handsets -- does not appear to exist.

There is, moreover, no evidence that the absence of a call back capability in non-initialized handsets is a serious problem. One public safety commenter acknowledged that it could not track the situation.[6] Another attempted to address the quantity of calls coming from non-initialized handsets by simply making an assumption, without providing any corroboration or support.[7] No party has provided any quantifiable evidence as to the frequency of calls from non-initialized handsets, much less evidence of the need for a call back capability to such handsets.

Since it appears that activated handsets are used in the reported donation programs, any network solution (*assuming a solution could be developed*) -- would be unnecessary for these handsets (as well as time-consuming and costly). By activating handsets in donor programs, wireless carriers are incurring costs to ensure that donor handsets can be reached. The perceived problem identified by the public safety agencies has apparently been addressed, and no purpose would be served by requiring carriers and vendors to develop and deploy additional call back capabilities.

THE RECORD EVIDENCE DEMONSTRATES THAT A CALL BACK CAPABILITY FROM NON-INITIALIZED HANDSETS IS NOT TECHNICALLY FEASIBLE

The development of a call back capability for non-initialized handsets is not technically feasible, as both network operators and manufacturers have uniformly advised the Commission.[8] Mobile telecommunications networks are designed to route calls to handsets with working telephone numbers. Non-initialized handsets, by definition, do not have working telephone numbers and do not function within the existing network design. Thus, even if a call back capability could be developed, the solution would necessarily involve a fundamental network redesign.

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[3] *See Public Notice*, Comment Sought on Request For Further Consideration of Call Back Number Issues Associated with Non-Service Initialized Wireless 911 Calls, DA 00-1098, 15 FCC Rcd 10391 (May 18, 2000).

[4] *See* CTIA Comments, *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems,* CC Docket No. 94-102, at 10-11 (July 9, 2001).

[5] *See* Sprint PCS Comments, CC Docket No. 94-102, at 6 (July 9, 2001); Verizon Wireless Reply Comments, CC Docket No. 94-102, at 7 (August 8, 2001).

[6] *See* Texas 911 Agencies Comments at 3 (July 9, 2001).

[7] *See* Wireless Consumers Alliance Comments at 4 (July 9, 2001).

[8] *See, e.g.,* Exhibits 1 and 2 to Sprint PCS Comments (July 9, 2001)(Lucent and Nortel). Duplicate copies of these vendor letters are attached hereto. Cingular Comments at 2-7 (July 9, 2001); North American GSM Alliance Comments at 2-4 (July 9, 2001).

The public safety community acknowledges that call back capability would present significant technical impediments. For example, APCO, NENA and NASNA recognize that the technical feasibility of call back to non-initialized handsets is questionable.[9] Similarly, the Texas 9-1-1 Agencies, the party that first raised the issue of donor programs, concede that call back capability may not be achievable in the near future.[10]

One party claims to have an untested system that might work to support a call back capability from non-initialized phones. But as Sprint PCS has previously documented, this "solution" has numerous defects, including the fact that it would cost $7 billion to implement and would require every public safety answering point to upgrade its E911 network and customer premises equipment to become compatible with Signaling System No. 7 ("SS7").[11] We do not believe that PSAPs would support this proposal, even if it were proven to be technically feasible.

In sum, all credible evidence in the record demonstrates that even if a technical solution could be found, the cost to develop and implement it would be enormous and time-consuming. Again, it is important to recognize that any solution would still only benefit those few 911 callers that are not current subscribers -- because active customers can already be called back if necessary. Moreover, it is the paying customers that will ultimately be required to pay for any solution since wireless carriers cannot collect payments from non-customers.

RESOURCES SHOULD NOT BE DIVERTED FROM IMPLEMENTATION OF OPERATIONAL PHASE I AND PHASE II SYSTEMS

The public interest is served by having industry and the public safety community focus their efforts on the continued implementation of operational Phase I and II E911 systems. This effort should not be undermined by having carriers, network operators and PSAPs divert their attention in pursuit of a problem that does not appear to exist.

By the end of this summer, Sprint PCS expects to be deploying Phase I service to over 2000 PSAPs. It is also scheduled to deploy by year-end the necessary network elements to support Phase II service to over 900 public safety agencies. Operational Phase I and II systems will benefit the 130 million mobile customers. Manufacturers are similarly busy producing Phase II modifications and improving the capabilities of their systems. PSAPs are also engaged in E911 deployment activities. Now is not the time to divert attention to the pursuit of an elusive and costly solution for an undocumented problem involving a very small number of handsets.

CONCLUSION

There is no factual record showing that the absence of a call back capability from non-initialized handsets is a problem. To the contrary, the record demonstrates that the CTIA donation program, the original basis for the inquiry, uses activated handsets. Of equal significance, there is no current technical solution available and any possible solution pursued would undoubtedly be costly and time-consuming. Wireless carriers, vendors and PSAPs are actively deploy-

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[9] *See* APCO, NENA, and NASNA Reply Comments at 2 (Aug. 8, 2001).

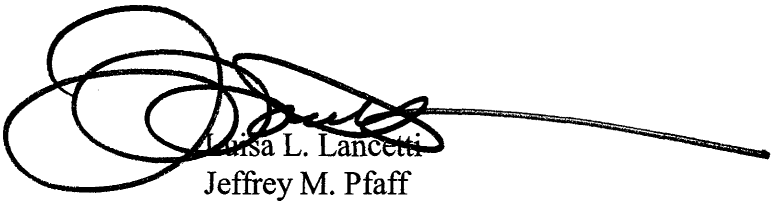
[10] *See* Texas 9-1-1 Agencies Reply Comments at 5 (Aug. 8, 2001).

[11] *See* Sprint PCS Reply Comments at 4-6 (Aug. 8, 2001).

ing Phase I and Phase II E911 service. Sprint PCS urges the Commission to refrain from imposing additional requirements that would impede these efforts. Finally, if the Commission believes that the absence of a call-back capability is a problem, the most cost effective solution would be to limit 911 calls to the over 130 million Americans that have initialized handsets and who can be called back today.

Pursuant to Section 1.1206(b)(1) of the Commission rules, one copy of this letter is being filed with your office electronically. Please associate this letter with the file in the above-captioned proceeding.

Sincerely,



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Attachments

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July 05, 2001

Jim Propst
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Dear Jim:

This letter responds to your request to summarize the challenges faced in developing and implementing a solution to support a call back capability for mobile handsets that are not service initialized.

Lucent Technologies is familiar with the call back issue, having participated in industry forums and having monitored FCC proceedings on the subject. While Lucent has not specifically dedicated resources in an attempt to identify a feature that would support call back capabilities from non-initialized handsets, we believe that significant development activities and resources would be required.

At a minimum, the following technical issues must be addressed:

1. How to provide and track a unique mobile station identity (MSID or MIN) for each non-subscriber mobile unit;
2. If temporary local directory numbers (TLDN) are utilized, how to prevent pool exhaust and how to handle inter-system roaming with TLDN callback;
3. How to minimize directory or telephone number exhaust;
4. How to solve the potential dangling MSIDs/mobile directory numbers (MDN) problem for unsubscribed mobiles that are lost or destroyed.

While TIA TR45 J-Std-036 (E911 Phase II) has discussed the call back feature, the standards body has not reached any formal decisions or outcomes on these and other issues.

Lucent believes development of a callback feature would be costly and entail significant development time. Lucent cannot provide an estimate of these costs, because no current solution or standard exists. While it is impossible to ascertain the exact costs and development schedules, we are confident that the time and expense of this effort would be substantial.

Feel free to contact me if you have any questions regarding the foregoing.

Sincerely,

Chris Fernandez

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Re: FCC NPRM CC Docket No. 94-102, RM-8143, proposed rule to provide call back numbers to out-of-service handsets that make calls to 911

Dear Jim:

This letter is in response to your request for a network manufacturer's perspective on the 911 call back issue for Sprints CDMA networks.

A feature that would allow a PSAP to call back an out-of-service handset does Nortel Networks is of the opinion that a requirement to assign a call back number to out-of-service handsets in circulation today would require a major network redesign, likely cost Nortel Networks millions of dollars in design efforts, take years of standards redefinition and design, and potentially result in a solution that would not work, especially for current handsets.

Networks are carefully designed to only support "registered" handsets, where the Visitor Location Register ("VLR") and/or the Home Location Register ("HLR") contain information about the handset that supports identifying workable call back information. Out-of-service handset call back information is removed from system memory for obvious fraud, network memory consumption, and telephone number reassignment reasons.

Nortel Networks does not believe it is possible with current network and handset design to provide either permanent or temporary 911 call back numbers to out-of-service handsets. Nortel Networks believes the consequences of a network re-design are so great that no proposed solution should be seriously considered without the FCC, in concert with interested parties, undertaking a very complete end-to-end (handset to PSAP) review of the scope and potential costs of the network redesign problem.

Solutions that involve either "permanent" or "temporary" numbers pose significant problems. A permanent number solution would put increasing quantities of numbers in network memory, likely exceed network memory capacity, speed telephone number exhaust, open the door to fraud and likely require handset re-programming (if possible).

A temporary number solution (e.g. assignment of a Temporary Local Dialing Number or TLDN) would 1) require the network to store a pool of dialable numbers, 2) require a re-design of the network to check for temporary number need (requiring all 911 calls to be checked for validation), 3) aggravate number

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exhaust (while less than the "permanent" solution aggravation), 4) open the door for fraud, and 5) likely require handset re-programming (if possible). At present outgoing emergency calls from mobile handsets are not authenticated or validated. They are sent to the appropriate PSAP without checking for a valid subscriber entry in either the HLR or VLR. In the case of a non-subscribed mobile handset, registration does not occur within the network and thus even if a TLDN were created there would be no valid subscriber entry to recognize the TLDN.

Additionally, calls to non-subscribed mobile handsets cannot be delivered because there is no subscriber entry. As it stands today, there is no method to place a call to a mobile handset without a subscription. The network is not currently designed to allow a call to be placed to an out-of-service handset.

Current FCC rules provide that a carrier transmit a 911 call to a PSAP without validation. The current rule would need to be reversed for a network to assign a temporary call back number to out-of service units. Years of standards and design work would likely be needed. By the time tested solutions would be ready to work many operating systems would have replaced older systems.

There are no standards in place for CDMA networks to build a solution as broad in scope as described in the NPRM. Standardized solutions are needed to support 911 callers roaming between networks, or within a home network using different vendor equipment. Nortel Networks would estimate it would take substantial time to develop CDMA standards for a full solution, and even then it would not likely work for many legacy handsets in circulation. Nortel Networks cannot provide an estimate of the cost to a carrier to provide 911 call back to out-of-service handsets due to the extreme amount of development effort that would be required.

Appreciable design resources within Nortel Networks continue to focus on currently mandated regulatory requirements. Most other 911 "solutions" in progress have not yielded the performance, nor ease of development, other developers had projected. The critical needs of the general population is better served by other FCC 911 mandates than by call back from out-of-service handsets which, as noted above, would require the redesign of existing 911 systems.
Finally, Nortel Networks notes that the CTIA Call to Protect program does provide reprogrammed handsets to needy individuals. The CTIA program fills some of the call back need, but does so using existing network design. The FCC proposal would require substantial network redesign and are unnecessary for these types of programs.

Regards,
Doug Wolff
VP-CDMA Wireless Networks
Nortel Networks

How the world shares ideas.